Canadian Home Builders' Association

CHBA Response to the CBHCC Policy Consultation

Phase 1: Embodied GHG draft policy positions

CHBA appreciates the opportunity to provide comments to the Canadian Board for Harmonized Construction Codes (CBHCC) consultation on Phase 1 Embodied GHG draft policy positions.

The Canadian Home Builders' Association (CHBA) continues to support code development where it follows principles of clear policy analysis, evidence-based decision-making and where it emphasizes cost-effective – ideally cost-neutral – acceptable solutions that equally solve the climate and housing affordability crises in Canada. CHBA shares Canada's climate ambitions and supports practical pathways to lower GHG emissions — but any action must also safeguard housing affordability, supply, and constructability. We believe climate and housing objectives can and must be advanced together with affordability.

Please consider our views and comments in more detail on the pages below, presented section-by-section aligned with the CBHCC's consultation document. The consultation text is *"quoted"* in full for the reader's convenience. Our responses and recommendations reflect the input from our members and industry partners.

Executive Summary of CHBA Recommendations

The Canadian Home Builders' Association (CHBA) cannot support the regulation of embodied greenhouse gas (GHG) emissions in the National Model Codes as proposed at this time. The CBHCC's draft policy direction proposes regulating an emerging and complex issue without first establishing a clear policy rationale, establishing robust and credible data on which to base decisions, exploring alternatives, or demonstrating that such regulation would be effective, practical, or cost-efficient. The approach lacks integration with other climate and housing objectives, and any assessment of broader impacts—particularly on affordability and housing supply.

CHBA strongly recommends that low-rise, wood-frame constructed housing be exempt from any embodied GHG requirements at this stage because these homes already have low embodied emissions per square metre compared to larger buildings. Premature regulatory action that could lead to discouraging the construction of basements, could reduce housing supply, impede moving to more factory-built construction approaches and increase costs with little climate benefit. Regulation should not proceed until field data is collected, modeling tools are tested, and practical, equitable compliance options are available across all building types, including small and very small homes.

CHBA supports long-term goals to reduce GHG emissions and urges the CBHCC and NRC to start with publishing a voluntary guide and benchmarking data for homes rather than regulation. A more deliberate, evidence-based policy process—grounded in full stakeholder

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consultation and integrated with energy and resilience goals for homes—is essential to ensure that future codes deliver meaningful climate outcomes without undermining housing affordability or constructability. The NRC guide should be informed by a full environmental scan of best practices and field trials to confirm cost effectiveness and constructability.

If CBHCC decides to move forward with regulation at this time despite our comments above, CHBA urges the CBHCC to ensure prescriptive compliance paths are provided for *all* performance tiers, to introduce exemptions for small homes where the regulatory burden would exceed societal benefit, and to acknowledge the disadvantages that the current scope places on off-site construction methods. Designers should be allowed to trade off embodied GHG performance with energy efficiency, operational GHG, and climate resilience design elements at the building level to allow for optimized, whole-building design solutions. Future embodied GHG emission targets should also recognize a potential higher baseline case for 2030 codes because of other new proposals requiring more structural materials.

CHBA remains committed to climate action and stands ready to work collaboratively with government and industry partners on voluntary tools, field trials, and data collection to lay the proper foundation for any future regulatory approaches.

Introduction

> *"This policy position paper presents the Canadian Board for Harmonized Construction Codes' (CBHCC) approach on addressing embodied greenhouse gas (GHG) emissions for new houses and buildings in the National Model Codes. The purpose of this paper is to support the development of technical provisions in the 2030 code cycle. The draft direction enclosed focuses on embodied GHG emissions and was developed alongside the CBHCC's 2025 code cycle work, which introduces a new GHG emission objective and technical requirements to address operational GHG emissions. Phase 1 provides initial direction. The CBHCC is considering expansion of scope to include other building elements and/or life cycle stages and performance evaluations metrics, and, as applicable, will provide further direction at a later date."*

CHBA notes that the introduction calls the paper a "policy *direction*" which prompted us to provide some general feedback on the way the CBHCC provides its policy guidance. Starting to communicate to code users only when policy *direction* is provided, generates significant concern regarding the CBHCC's approach to policy work. Foregone conclusions and making decisions in isolation from important societal context can easily lead to poor outcomes for Canadians as will the general lack of objectivity, lack of consideration for cost-effectiveness and lack of scientific grounding displayed in this '*draft policy position*'.

For example, this *policy position* jumps right into *how* to regulate embodied GHG emissions but fails to provide a neutral, evidence-based evaluation of all available policy instrument alternatives and the entire policy context surrounding building regulation like housing affordability and supply.

CHBA also notes that – while affordability was portrayed as an "*important policy consideration*" in the second phase of the consultations on operational GHG emissions, it is not mentioned once in this consultation.

Most notably, the policy position does not even provide a simple justification of why or how regulating building construction is the best way for Canadians to see the positive policy outcomes

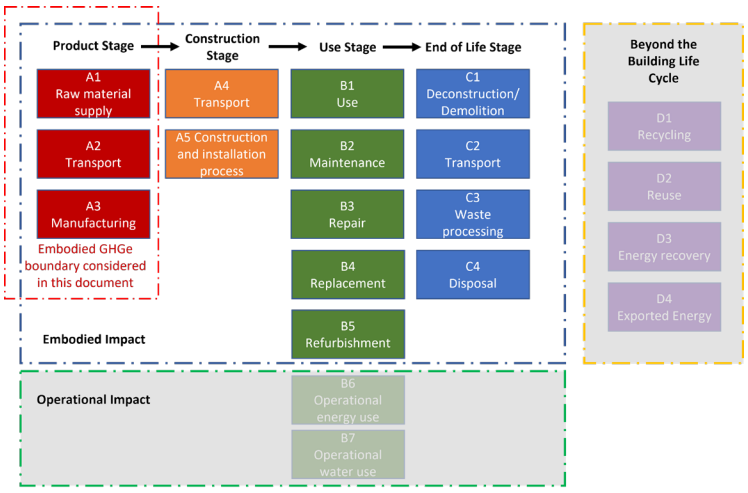
expected on reducing embodied GHG emissions and how much reduction potential could be anticipated compared to other options. The fact that embodied emissions *can* be reduced doesn't mean regulating it in the building code *will be* the best way to do it.

The policy position also doesn't mention common limitations of regulatory approaches and how they should be addressed, like increased cost and administrative burden or how building regulation should also support other related policy choices by reducing current barriers (e.g. how will this help to revitalise existing buildings, or increase the use of recycled content in materials). As the federal government looks to remove red tape on home construction, this will add more.

The policy position also does not mention that such significant code changes would need special consensus consideration from a broad membership at every stage, which is currently not met as the membership of the Task Group on Embodied GHG Emissions does not include major affected material interest stakeholders. Furthermore, the volume of changes being put underway for 2030, the number of new committees created and new operating procedures giving license to committee chairs to ignore material interest and other stakeholder associations interests as "non-consensus," would all minimize the chances for such broad consensus on this subject at the National Model Code Committee on Climate Change Mitigation.

1. CBHCC should consider its policy choices more broadly in the context of other possible policy alternatives and compares the expected outcomes for all Canadians before deciding whether regulating an issue is the best outcome.
2. CBHCC should consult stakeholders in the policy analysis stage of discussion rather than at a time when the CBHCC seems to have already made a decision and is issuing directions to committees.
3. CBHCC should re-introduce affordability as an "important policy consideration" into this policy position.

Background



"The 2020 editions of the National Model Codes contain an energy efficiency objective and related requirements for the design and construction of new buildings and houses. The proposed 2025 edition of the National Energy Code of Canada for Buildings (NECB) and National Building Code of Canada (NBC) will also include an objective to address GHG emissions alongside technical requirements related to operational GHG emissions. Approximately 27% [1] of Canada's GHG emissions are due to buildings. Embodied GHG emissions can account for up to 50% [2] of a new energy efficient building's life cycle GHG emission. Minimizing excessive embodied GHG emissions in the National Model Codes

will help reach GHG emission reduction goals. A life cycle assessment (LCA) is used to quantify a building element's GHG emissions by evaluating the impacts at each stage of the building's life cycle. The life cycle of buildings consists of four stages as shown in Figure 1."

The statement that "*approximately 27% of Canada's GHG emissions are due to buildings"* prompted us to repeat comments we have made to the previous consultation on operational GHG emissions and in the process of approving the proposed changes. CHBA perceives these statements as the CBHCC implying that regulating operational and embodied GHG emissions in building construction can reduce these emissions by a substantial amount. However, the CBHCC has not even provided information to Canadians by how much, and if at all, the approved and soon to be published 2025 code changes will reduce operational GHG emissions in Canada's building sector – let alone disclosing how much of a reduction of embodied GHG emissions in buildings the CBHCC expects from the 2030 codes.

Presenting values like the 27% statistic in every consultation and in the rationale of proposed changes without following up with absolute values for current Part 9 construction and Part 3 construction may be perceived as the CBHCC believing that regulating buildings would reduce the 27% embodied emissions in the building sector significantly or altogether.

However, regulating operational GHG emissions in the 2025 codes may not even shave 1% off the 27% value – even if all provinces and territories adopted the highest levels at once – because the 2025 codes:

- will not reduce the emissions of the existing building stock of 14 million homes
- will only affect 60% of housing starts because QC, MB and BC (40% of Canada's housing starts) are effectively at zero emissions because of their fully electrified electricity grid.
- do not achieve any reduction in unregulated energy uses in homes and their associated emissions such as cooking energy, plug load electricity including EV charging, recreational and decorative home use of fuels (grills, fireplaces), lighting energy in housing, pools, hot tubs, etc.
- missed the opportunity to reduce operational GHG emissions in high-intensity grids by not recognizing in the 2025 codes that solar photovoltaic equipment on homes is a tried, tested and true method to reduce or offset the operational GHG emissions on-site.

Similarly, limiting the scope on embodied GHG emissions to new buildings only, and cradle-to-construction life-stages (A1 to A3) for structural materials will significantly limit any benefit that codes could attain in terms of GHG emission reductions.

The paper also states "*Embodied GHG emissions can account for up to 50% of a new energy efficient building's life cycle GHG emission*" and that *"minimizing excessive embodied GHG emissions in the National Model Codes will help reach GHG emission reduction goals."*

CHBA believes this statement shows the CBHCC's bias implying that 50% is a large portion and no choice is available except to reduce it by regulation. Instead, it could have been presented as a great achievement that improvements in building energy efficiency and the associated operational emission reductions, particularly in homes, over the last 40 years have created a situation where now half of a home's life-cycle emissions are attributable to embodied GHG emissions. To illustrate this point, one could also misrepresent energy savings by stating that domestic hot water (DHW)

accounts for 50% of the total energy use in a Net Zero home, even with the most efficient water heater available. While this sounds like a lot, these 50% may only represent a few Gigajoules (GJ) of energy annually. That same water heater in a regular home may only account for 15% of the total energy use. Using percentages and ratios in this context is misleading and we suggest presenting actual values showing total emissions instead along with the total potential reductions estimated.

It is not surprising that the portion of embodied emissions increases with the reduction of operational emissions because of years of improving energy efficiency in residential construction. Using absolute values (for current practice and the future codes reduction potentials) instead would show that low-rise residential wood-frame housing in Canada only produces 150–300 kg CO_2e/m^2 while concrete high-rises typically produce 400–800+ kg CO_2e/m^2, which would prove that housing in Canada is not a grave concern when it comes to embodied GHG emissions.

Similarly using estimates of likely savings in embodied GHG emission for homes, say by replacing full basements with slab-on-grade construction and replacing the lost living space above ground to keep housing supply constant, the expected net savings could be as low as 10 to 30 kg CO_2 e per m^2 floor area suggesting that this small benefit may not be worth this drastic change of an already good enough construction practice.

Similarly, the statement "*will help reach GHG emission reduction goals"* is an empty claim, which the CBHCC has not been able to substantiate. If no province adopts the 2025 changes or the 2030 changes, not a single gram of CO_2-equivalent emissions will be reduced.

Figure 1 shows the intended limitation of the scope for the 2030 codes and limits any consideration to the Product Stage of the life cycle also known as stages A1 to A3. CHBA notes that no explanation or justification for this limitation is given. We also note that embodied GHG boundary considered for the draft policy position is inconsistent with the definition provided immediately below the illustration.

If Federal and Provincial/Territorial Governments had jointly considered all possible policy options for Canadians with the goal of reducing embodied emissions from raw material extraction, transporting and manufacturing (A1 to A3), one might expect that addressing the building material supply chain from the beginning (producers, importers, manufacturers), similar to the Federal Plastics Registry through the Canadian Environmental Protection Act, might have a more effective outcome than regulating the materials' end use in construction (at a time when the emissions have already been created and when building materials already have penetrated the global supply chain).

4. NRC should provide absolute embodied GHG benchmark values for actual Canadian Part 3 and Part 9 buildings paired with estimates of expected GHG reduction targets in each respective building sector once the most ambitious levels of energy efficiency, operational and embodied GHG emission codes are fully adopted – accounting for all limitations set by this CBHCC policy direction.
5. CBHCC should define what it means by 'excessive' what it considers an 'acceptable' level of emissions and what it considers as 'unacceptable'.
6. CBHCC should direct its committees to include the overall positive outcomes (benefits) expected by the committees in Proposed Change Forms assuming proposals would be

adopted by all jurisdictions.

7. CBHCC should direct its committees to quantify the impact of proposed changes on home construction and how it relates to housing supply provided by basements.
8. CBHCC should conduct a broad policy analysis – together with other Federal government partners – on the effectiveness of this policy direction to regulate builders and designers for the end use materials, rather than regulating material production, transportation and extraction itself.
9. CBHCC and NRC should conduct and publicly share a national/international environmental scan on policy instruments for reducing embodied GHGs – together with the positions held by the Federal Government and all provincial/territorial governments when it comes to regulating GHGs.

Definitions

> *"The following definitions are used in this document: Embodied GHG emissions [3] refer to the greenhouse gas emissions associated with materials and construction processes throughout the life cycle of a building excluding emissions from building energy use. This can include emissions from material extraction, manufacture, transportation, construction, replacement, refurbishment, demolition, removal. Life cycle is a term used in the context of assessing the overall environmental impact of buildings from the extraction of raw materials all the way to the disposal of waste at the end of their useful life. In the context of a building, it includes the product stage, construction stage, use stage and end-of-life stage. For the purpose of this policy position, operational impact and the Beyond the Building Life Cycle Stage D, is not in scope. The operational impact is addressed in the CBHCC's policy paper on operational GHG emissions [4]."*

It is unclear why the paper defines embodied GHG emissions if it does not intend to use the term as defined for code development instead of defining the limited boundaries version of the term that only includes A1 to A3, which would be useful to committees.

It is also unclear why – in this paragraph – the CBHCC excludes the "*operational impact and the Beyond the Building Life Cycle Stage D*" from its scope but does not mention the limited boundary of the embodied GHG life stages for the purposes of this policy position.

10. CBHCC should define only the limited version of *embodied GHG emissions* (e.g. "*Limited Embodied GHG Emissions (A1 to A3)*") consistent with policy direction given to committees under Building Elements and Life-cycle Stages.

Draft Policy Direction

Tiered framework

> *Unless otherwise specified, the following are applicable to new construction only. Embodied GHG emissions National Model Code requirements should be developed in a tiered framework that allows jurisdictions to adopt changes at a pace that suits their needs while aligning on the overall approach and objectives. The tiered framework should incorporate progressively improved embodied GHG emissions performance targets within the parameters described below. In addition to the life cycle stages and*

building elements included below, the tiered framework should be able to accommodate the future addition of other life cycle stages and building elements and should provide options for a range of available construction materials. The parameters described below are based on the current state of knowledge and research in the subject area and reflects the availability of data that is suitable for development of National Model Code requirements in the 2030 code cycle. The CBHCC will continue ongoing policy discussions, which could inform future code development, on expanding the tiered framework described in this document to include a broader scope of life cycle stages, building elements, and/or GHG emissions metrics. The baseline level of the tiered framework should represent the minimum performance level that is attainable using construction materials and practices that are consistent with building elements associated with the lowest performing energy efficiency and operational GHG emissions tiers in the 2025 National Model Codes. Higher tiers of performance should include incremental improvements in performance over the baseline requirements. Where practical, the framework should leverage existing standards and guides.

CHBA has always supported anticipatory regulation schemes (tiers, steps) as they are generally enabling the entire building sector to learn and move forward towards known performance expectations. CHBA notes however that insufficient data exists to select a baseline (current construction for the 2030 codes) and realistic end goals. Calculating embodied GHG emissions alone would be a steep learning curve for the entire sector including enforcement officials. We are also concerned that, yet another modeling requirement will lead to additional cost of consultants, let alone that the simulation software models currently available are still evolving and that different models are making different assumptions and using different material values.

CHBA also notes that selection of energy use improvements (energy tiers), operational GHG reductions (performance levels) and future embodied GHG reduction levels should all be part of an integrated design process that also includes climate resilience. CHBA is concerned that the tiered framework described in the paper does not enable an integrated design approach (i.e. trade-off) between energy efficiency, operational and embodied GHG emissions requirements and that climate resilience is not factored in at all.

CHBA is concerned with the lack of this integration or optimization in the policy direction, which – in our view – would include cost optimization. As an example, we have communicated in 2021 to the CCBFC that our data and other studies supported the view that the tier 5 energy performance target is likely too high for a carbon-optimized solution and for cost-effective construction to reach Net Zero. We expect similar results once the operational GHG emission requirements are implemented. CHBA is concerned that integrating and optimizing these building design features in fragments through code requirements over a decade or two of codes editions and their respective adoption or adaptation is very disruptive to the entire building sector compared to an optimized and integrated design solutions at the building level.

We are dismayed that our input to CBHCC Consultations since 2021 on the need for integrating all climate change design elements has not been considered and acted upon and that – even in this consultation – optimization and integration of energy, carbon and resilience consideration at the building level is not addressed like one would expect the traditional, fundamental house/building-as-a-system approach to be used (which reduces unintended risks and costs). Instead, we fear more unmitigated and potentially costly overregulation (like that of tier 5 being more than what is required to reach net-zero-energy-ready). Similarly, building ultra-energy-efficient buildings in regions with low-emission electricity grids will lead to higher embodied GHG emissions associated

with high-performance materials and systems.

CHBA notes that the CBHCC does not account for additional material that other 2030 requirements will add to address climate adaptation or resilience. The CBHCC's proposed baseline does not include other 2030 priority subjects like resilience against flood or wind or permafrost may introduce the need for additional exterior structural elements or more materials to construct these elements. Future 2030 requirements for high-wind resistance and flood protection or permafrost may increase the quantity of materials. e.g. concrete, coatings, roofing, sheathing, metal fasteners, etc. This should be accounted for in the tier 1 baseline code for embodied GHGs.

11. CBHCC should give instructions to its committees to create a tier 1 only that requires calculation of embodied GHGs for all buildings to establish a true baseline/benchmark of the 2030 codes.
12. CBHCC should take the time to consult on policy instruments including guides, standards and codes to create an overall optimizing design approach that integrates energy efficiency, GHG emissions and resilience at the building level before regulating individual design steps in piecemeal and five years apart from each other.
13. CBHCC should start with requiring a benchmarking-only tier, such that the first time the NBC refers to embodied GHG emissions, the calculation and collection of actual field data should be the focus of the regulation prior to setting improvement thresholds.
14. NRC should start evaluating embodied GHG modelling software and creating acceptability criteria for deviations similar to the approach of ASHRAE 140 for energy models – to ensure fairness, consistency and repeatability.
15. CBHCC should exempt designers, who conduct and design buildings according to whole life cycle analysis of GHG emissions, from any regulation for A1 to A3 stages. This promotes optimizing and integrating energy efficiency, carbon and resilience elements at the building level rather than potentially overregulating isolated aspects of climate mitigation and adaptation.

Building elements and life cycle stages

> *"When considering the impact of embodied GHG emissions on buildings elements, the National Model Codes should as a starting point have performance requirements for life cycle stages A1-A3 for the structural elements (including foundations and substructure), and, if practical within the code cycle, for the building envelope."*

CHBA notes that an approach characterized by the phrase *"as a starting point"* is suitable for a guide, but not for a code. Similar to how NRC is developing its Wildfire Guide through the stages of technical information development (guide -> standards -> industry field trials -> codes), a guide on embodied GHG emissions in buildings and homes would be a necessary first step.

CHBA is also concerned with scope creep being encouraged by using the open-ended phrase "*as a starting point*" giving license to committees to expand the scope with no boundaries being given for example to interior partitions, finishes, appliances/equipment, millwork. These interior elements are easily subject to client/market preferences and would be unduly challenging to regulate

effectively.

On the other hand, CHBA is concerned that the limitation to stages A1 to A3 may prevent off-site construction (modular and prefabrication) in demonstrating reduced embodied emissions during the construction stages of the carbon life cycle. Some studies suggest the level of prefabrication can reduce the amount of material waste, energy use and operational GHG emissions during the construction stage compared to on-site construction, all of which would typically be counted as embodied GHG emission reductions in the whole-building life-cycle analysis.

CHBA questions what *"practical"* means in the context of *"within the code cycle"*. Does it mean if consistent and broadly available EPD data for a large amount of materials exists? Does it mean "if there is time" or "if volunteers or consultants draft requirements by themselves"? CHBA is very concerned that committee chairs and advocates for the issue will take the statement *"if practical within the code cycle"* as clear marching order to 'go for it', leading to rushed and premature code development that will be very difficult to undo.

16. NRC should create a guide for embodied GHGs and field-trial it with industry before regulating the issue. The guide could explore other GHG life-cycle stages and allow an assessment of what is constructible and cost-effective. CHBA stands ready to assist NRC.
17. CBHCC should consider an exemption from embodied GHG emission requirements for factory constructed buildings and prefabricated assemblies recognizing their overall reduced embodied GHG emissions during the construction stage of homes.
18. NRC should engage in research comparing the GHG emissions of on-site and off-site construction stages of homes.
19. CBHCC should limit the metrics to exterior structural elements and give strict direction to committees not to expand requirements to interior partitions, finishes, appliances/equipment, and millwork because reliable data (EPDs) for these material groups does not seem to be available at scale and in the same quality as for basic structural materials.

Performance evaluation metrics

> *"Performance evaluation of embodied GHG emissions in the National Model Codes for the 2030 code cycle should include the percent-improvement (i.e. reference approach). The CBHCC will continue ongoing policy discussions, which could inform future code development, on expanding the performance evaluation to include both intensity (kg CO2 e/m2 of gross floor area) and absolute metrics (metric tons of carbon dioxide equivalent, MT CO2 e) and will provide further direction at a later date."*

CHBA notes that the tiered approach suggested is very similar to how performance requirements were introduced in previous tiered frameworks and if CBHCC goes ahead with setting requirements for homes, CHBA would support the reference/proposed approach as well as intensity and absolute metrics, all of which offer design flexibility.

However, we have some concerns with the phrase "*ongoing policy discussions*". While carbon storage in bio-based materials like wood may offer climate benefits—particularly for low-rise housing—its inclusion in embodied carbon metrics requires early and clear policy direction from the CBHCC. Wood-frame constructed homes may already perform favourably compared to other

building systems without counting storage, but many performance models rely on assumed storage to meet top tiers. This is not unlike how energy performance or operational GHG calculation outside codes rely on photovoltaics to reach net-zero, which was excluded from operational GHG code requirements. Similarly, delaying a decision on carbon storage risks undermining fairness and coherence in the 2030 code cycle.

20. If the CBHCC moves forward with regulating embodied GHG emissions for homes, CBHCC should instruct its committees to set a 'small house' carbon threshold and introduce an absolute cut-off for sufficiently small units where the initial amount of embodied GHG is sufficiently small and the incremental benefit of replacing material would also be small and where the regulatory burden would therefore exceed the societal benefit.
21. CBHCC should resolve early the foundational policy question of whether carbon storage is counted or not to ensure credible and comparable outcomes across building types and all performance metrics.
22. If the CBHCC moves forward with regulating embodied GHG emissions for homes, CBHCC should include intensity-based and absolute targets as compliance methods from the beginning to not disadvantage some forms of housing (see below).

Prescriptive options

> *"The scope of work should include prescriptive options for housing and small buildings (Part 9 of the National Building Code) that are available in the same edition of the National Model Codes as the tiered framework."*

CHBA applauds the CBHCC for directing committees to work on prescriptive options in parallel, which is similar to how the operational GHG emissions tiered framework was eventually introduced.

CHBA is however aware of a growing body of research (including NRC's) recognizing that homes with wood-frame walls, floors and ceilings are producing less embodied GHG emissions *per floor area* compared to larger buildings built with concrete and steel and often entirely without wood. Some research suggests that the only construction elements to optimize in low-rise residential wood-frame construction are concrete foundations and insulation choices. While these choices seem to suggest that elimination of basements could be a simple prescriptive requirement, CHBA warns that this would have grave consequences for the housing supply, such as increased cost of construction for above-grade stories compared to basement and the loss of rental space.

23. CBHCC should exempt Part 9 wood-frame constructed homes from all embodied GHG requirements due to their inherently lower embodied GHG emissions per floor area (compared to large buildings and ICI construction) and the grave consequences to housing supply and housing affordability that eliminating or reducing basements could have.
24. If the CBHCC proceeds with introducing any requirements for homes in Part 9, CHBA suggests adding "for every performance tier" after "prescriptive options" to avoid a similar shortfall experienced for the energy tiers, where prescriptive options were not made available for all tiers in the 2020 NBC Part 9.

Geographical flexibility

"The tiered framework should allow for flexibility to account for the unique circumstances of rural and remote areas."

CHBA notes that this direction to committees is very vague. CHBA is aware that some building materials are not easily or affordably available in all locations, but a further explanation of what the CBHCC means here would have been beneficial. How is a committee supposed to regulate transportation, availability and affordability of materials?

CHBA also notes that there are geographical requirements set by the code itself that impose using more materials (2025 structural load changes or lateral load requirements, for example) and that the reference and proposed method would have to account for these local differences.

25. CBHCC should expand on how this flexibility can be implemented with the current data available to code committees.

Implications of regulating embodied GHG requirements *not mentioned* in the Policy direction

The CBHCC does not give explicit direction to its committees to delineate between Part 3 and Part 9 construction.

Committees should not presume that methods appropriate for Part 3 design and construction are equally appropriate for Part 9 residential construction. For example, if requirements were to be based on existing models such as that used in the City of Vancouver's Embodied Carbon Guidelines or the NRC Guide referenced in the consultation document, committee should be aware that those guidelines were specifically designed for Part 3 buildings and would involve special consultants, which may neither be necessary nor appropriate for Part 9 buildings.

26. If the CBHCC proceeds with introducing any requirements for homes in Part 9, CBHCC should instruct its committees to treat Part 9 separately and in a simplified way or by exempting it entirely, as the unique and repeatable characteristics of housing and small buildings may justify requirements that differ from those in Part 3, the NBC, or the NECB and because wood frame construction is an overall low-embodied GHG construction type.

CBHCC does not provide any direction on compliance options that are equitable across all housing types and sizes.

Despite existing small-volume relaxations for energy and operational GHG requirements small-scale multi-unit housing and secondary suites ('gentle-density housing) are already disadvantaged. Similarly, intensity-based (per m^2 floor area per dwelling) embodied GHG metrics would tend to disadvantage gentle density housing. e.g. applying embodied carbon limits to secondary suites, when many suites are in basements.

27. CBHCC should create compliance options and offers metrics that are equitable across all housing types and sizes, especially small and very small housing forms.

CBHCC does not provide any policy direction on protecting consumer choice of building materials and its impact on housing affordability.

While the CBHCC mentions geographic flexibility, which seems to aim at material availability, the CBHCC does not mention material affordability and the cost of housing.

28. CBHCC should preserve flexibility for regionally appropriate and durable materials, to prevent unintended impacts on affordability, performance and consumer choice.

Conclusion

CHBA shares Canada's climate ambitions and supports practical pathways to lower GHG emissions—but any action, especially regulatory action, must also safeguard housing affordability, supply, and constructability. We believe climate and housing objectives can and must be advanced together with affordability a core consideration.

CHBA is in the process of developing an embodied GHG emissions option into our Net Zero Home Labelling Program, but we have found that data availability is currently light, which may be acceptable for a voluntary program, but is certainly not acceptable for a code. This also means broad industry experience from our program members may not be available to inform good code writing before the last proposed change would have to be approved.

To that end, CHBA is ready to work collaboratively with the CBHCC and NRC. We propose co-developing a voluntary national guide on embodied GHGs, launching field-trial projects in both Part 3 and Part 9 buildings, and establishing an open data-sharing platform to build industry capacity and refine calculation tools before any regulatory step is considered.

These collaborative efforts should precede regulation and deliver three essentials:

(1) a comprehensive environmental scan of federal, provincial, and territorial policy instruments,
(2) robust benchmarking of actual embodied emissions across building types, and
(3) clear, equitable compliance metrics that integrate energy efficiency, carbon, and resilience at the building level.

Until this groundwork is complete, CHBA cannot support embodied-GHG regulation in the National Model Codes and urges that low-rise wood-frame housing be exempt from any interim requirements. This approach will yield credible climate outcomes without undermining Canadians' ability to access safe, affordable homes.